

CLAIMS

1. A promoter sequence which allows the expression of a gene of interest in the tissues of a plant, except in the maturing seed and in the dry seed, characterized in that it comprises a sequence having at least 80% identity with the sequence, or a portion of the sequence, of the promoter of the Arabidopsis FAH gene.
2. The sequence as claimed in claim 1, characterized in that it comprises a sequence having at least 80% identity with the sequence, or a portion of the sequence, SEQ ID No. 1.
3. The sequence as claimed in claim 2, characterized in that it comprises the sequence, or a portion of the sequence, SEQ ID No. 1.
4. A method for isolating and characterizing the promoter of the FAH gene in plants, comprising the following steps:
  - a) using a primer comprising a sequence having at least 80% identity with a sequence containing at least 10 consecutive nucleotides of the sequence SEQ ID No. 5 or a complementary sequence, or a primer which hybridizes under high stringency conditions to any coding sequence for SEQ ID No. 4 or a sequence having at least 80% identity with a sequence containing at least 10 consecutive nucleotides of the genomic sequence of the FAH gene of Arabidopsis, accessible under the number AC003096, or a complementary sequence, for isolating and/or amplifying the sequence upstream of the 5' end of the FAH gene,
  - b) cloning and sequencing of the sequence obtained in step a).

- 20 -

5. A promoter sequence which allows the expression of a gene of interest in the tissues of a plant, except in the maturing seed and in the dry seed, characterized in that it comprises a sequence which has at least 80% identity with the sequence, or a portion of the sequence, of the promoter of the FAH gene, and which can be obtained using the method as claimed in claim 4.
6. ~~The use of a sequence as claimed in one of claims 1 to 3 and 5, for identifying fragments of the sequence SEQ ID No. 1 which allows the expression of a gene of interest in the tissues of a plant, except in the maturing seed and in the dry seed.~~
7. ~~An expression cassette, characterized in that it comprises a sequence of interest fused to a sequence comprising a promoter sequence as claimed in one of claims 1 to 3 and 5.~~
8. The expression cassette as claimed in claim 7, characterized in that the sequence of interest encodes an RNA, a protein or a polypeptide which protects the plant against a biotic or abiotic stress, or which is involved in development, in particular in hormone metabolism, in signal transduction or in the control of the cell cycle.
9. The expression cassette as claimed in claim 7, which allows the cosuppression of a gene, characterized in that said sequence of interest encodes a protein or polypeptide capable of substituting for the function of an endogenous protein or polypeptide.
10. The expression cassette as claimed in claim 7, characterized in that said sequence of interest encodes an antisense sequence directed against a target gene.

Sub  
A1

>

- 21 -

11. The expression cassette as claimed in claim 7, characterized in that said sequence of interest encodes an enzyme involved in the production of metabolites by a plant.
- 5
12. A vector comprising an expression cassette as claimed in one of claims 7 to 10.
- 10
13. A plant cell transformed with a cassette as claimed in one of claims 7 to 10 or a vector as claimed in claim 12.
- 15
14. A plant transformation kit comprising a cassette as claimed in one of claims 7 to 10 or a vector as claimed in claim 12.
- 20
15. A method for preparing transgenic plants in which a gene of interest is expressed in all the tissues except in the maturing seed and in the dry seed, characterized in that it comprises the following steps:
- 25
- a) transferring a cassette as claimed in one of claims 7 to 10 or a vector as claimed in claim 12 into plant cells,
- 30
- b) culturing the transformed cells obtained in step a) so as to obtain said transgenic plants.
- 35
16. The method as claimed in claim 15, characterized in that the cells are chosen from embryonic cells originating from an immature embryo.
17. The method as claimed in either of claims 15 and 16, characterized in that the transfer is carried out using *Agrobacterium*, preferably *Agrobacterium.tumefaciens*.
18. A transgenic plant which can be obtained by carrying out the method as claimed in one of claims 15 to 17.

Sub  
A2Sub  
A3

- 22 -

19. The plant as claimed in claim 18, characterized in that it expresses in its tissues, except in the mature and dry seeds, an RNA, an antisense sequence directed against a target gene.

5

20. The plant as claimed in claim 18, characterized in that it expresses in its tissues, except in the mature and dry seeds, an RNA, a protein or a polypeptide capable of substituting for the function of an endogenous protein or polypeptide.

10

21. The plant as claimed in claim 18, characterized in that it expresses a protein of interest under the control of a promoter other than the promoter of the FAH gene, and an antisense sequence capable of inhibiting the expression of said protein of interest under the control of the promoter of the FAH gene, such that the protein of interest is expressed only in the seeds.

15

20

22. The plant as claimed in claim 18, characterized in that it expresses in its tissues, except in the mature and dry seeds, a coding sequence for a protein involved in the biosynthesis of metabolites, for a protein or a polypeptide which protects the plant against a biotic or abiotic stress, or for a protein which controls development, in particular [lacuna] in hormone metabolism, in signal transduction or in the control of the cell cycle.

25

30

23. The plant as claimed in one of claims 18 to 22, characterized in that it is chosen in particular from rapeseed, crucifers, maize, soybean, wheat, sunflower, pea, ornamental plants, and trees.

35

24. A seed obtained from a transgenic plant as claimed in one of claims 18 to 23, characterized in that

Sub  
A4

- 23 -

it does not contain the product of expression of  
the transgene.